Appl. No. 10/596,613 Aindt. Dated April 14, 2011 Reply to Office action of 01-14-2011 Attorney Docket No. P18737-US1 EUS/GJ/P/11-6540

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-25. (Cancelled)

26. (Previously Presented) A method in a receiver unit to receive communication signals from a transmitter unit via a multi-path channel, said method comprising the steps of:

estimating parameters of a channel filter function of said channel from said received communication signals from the transmitter unit;

sub-dividing the channel filter function into two or more parts, a function of which representing an approximation of the estimated full channel filter function;

representing the complex parameters of at least a selection of said parts of the channel filter function as actual parameter values, or as incremental values indicating the difference to a reference value; and,

composing a channel measurement message to be transmitted to the transmitter unit of a portion including said parameter representations and a portion indicating the manner of representing said parameters.

- 27. (Previously Presented) The method according to claim 26, wherein said function performs a summing of the sub-divided parts of the channel filter function.
- 28. (Previously Presented) The method according to claim 26, wherein the subdivided parts of the channel filter function comprise channel information of a ranked degree of significance.
- 29. (Previously Presented) The method according to claim 26, wherein the channel filter function is represented as a channel impulse response in the time-domain.

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- 30. (Previously Presented) The method according to claim 29, wherein the complex parameters of the channel impulse response are reproduced as amplitude and phase values.
- 31. (Previously Presented) The method according to claim 29, wherein the primary sub-divided filter function includes a representation of one or more of the most significant channel components.
- 32. (Previously Presented) The method according to claim 31, wherein the most significant channel component is the component having the shortest delay.
- 33. (Previously Presented) The method according to claim 26, wherein the channel filter function is represented as a channel frequency response in the frequency-domain.
- 34. (Previously Presented) The method according to claim 33, wherein a complex parameter of the channel frequency response is reproduced at least as an amplitude value and optionally by an additional phase value.
- 35. (Previously Presented) The method according to claim 26, wherein the complex parameters of said parts of the channel filter function are represented by their actual values in case of a significant change compared to a previous reference value.
- 36. (Previously Presented) The method according to claim 35, wherein the reference value corresponds to a previous channel parameter representation.
- 37. (Previously Presented) The method according to claim 35, wherein the reference value corresponds to a modelled estimate of the channel filter function.
- 38. (Previously Presented) The method according to claim 37, wherein the modelled estimate is a interpolation of the channel filter function from the complex parameters of the channel filter function.

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39. (Previously Presented) The method according to claim 37, wherein said modelled estimate of the channel filter function has been received by the transmitter unit.

40-45. (Cancelled)

46. (Previously Presented) An apparatus for processing communication signals received via a multipath channel, comprising:

means for estimating parameters of a channel filter function of said channel from said received communication signals from the transmitter unit;

means for sub-dividing the channel filter function into two or more parts, a function of which representing the estimated full channel filter function;

means for representing the complex parameters of at least a selection of the sub-divided channel filter function as actual parameter values, or as incremental values indicating the difference to a reference value; and,

means for composing a channel measurement message to be transmitted to the transmitter unit including said set of parameter representations and a header field indicating the manner of representing said parameters.

47. (Previously Presented) The apparatus according to claim 46, which is integrated in a mobile user equipment.

48-50. (Cancelled).

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